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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/731,367	12/08/2003	Noboru Asauchi	MIPFP018A	4371

7590 11/15/2005
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EXAMINER

HUFFMAN, JULIAN D

ART UNIT	PAPER NUMBER
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2853

DATE MAILED: 11/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

Office Action Summary	Application No. 10/731,367	Applicant(s) ASAUCHI, NOBORU	
	Examiner Julian D. Huffman	Art Unit 2853	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 October 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 4 and 5 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 4 and 5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arthur et al. (U.S. 5,049,898) in view of Sakamoto et al. (U.S. 5,719,686) and Skene et al. (U.S. 6,616,260 B2)

Arthur et al. discloses:

With regards to claim 4, a method of communicating with a plurality of print recording material reservoirs (fig. 2, element 12) equipped with memory devices (14), wherein the print recording material reservoirs are detachably mounted on a printer (column 1, lines 65-68, in Arthur et al., memory devices mounted on each reservoir are accessed as each reservoir passes a reading device 44, during movement of the carriage, column 3, lines 52-56).

The memory devices are written to when they are in a position in which the reservoirs cannot be removed (fig. 2, as clearly shown in the figure, the reservoir is not physically removable from its respective mount when its memory is being accessed by the reading device).

Arthur et al. does not expressly disclose determining whether all of the print recording material reservoirs are attached, or determining whether communication is possible with each memory device via signal lines when all of the plurality of print recording material reservoirs is attached and identifying a print recording material reservoir in which a communication malfunction has developed when determining that communication is not possible with any one of the memory devices.

Sakamoto et al. discloses determining, in a standby state after power on and before printing operations, if all print recording material reservoirs are attached (fig. 32, S81, column 15, lines 42-48).

Skene et al. discloses determining if communication is possible with each memory device via signal lines when the memory recording material reservoirs are attached and identifying a reservoir which may have a malfunction (column 8, lines 21-35, Skene et al. tests the signal line to each memory device for a short circuit).

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the device of Arthur et al. to determine if all of the reservoirs are attached (Sakamoto) and to determine if communication is possible with each of the memory devices (Skene), as taught by Skene et al. and Sakamoto et al. into Arthur et al., for the purpose of determining if the device is ready to operate in a standby period prior to printing operations (Sakamoto) and preventing memory communication errors from interrupting operation of a printer (Skene, column 8, lines 49-50).

Response to Arguments

3. Applicant's arguments filed 3 October 2005 have been fully considered but they are respectfully not persuasive.

Applicant argues that the ink cartridge of Arthur et al. can be removed at the position at which the memory element on the cartridge is read by the printer. Applicant states that the cartridge of Arthur is configured to be vertically detached from the printer. A review of Arthur et al. reveals no such teaching. Further, the alignment features of Arthur prevent removal in the vertical direction. As shown in fig. 3, the alignment features 30 mate with alignment features of the carriage which prevent the cartridge from moving in the vertical direction. The only manner in which the cartridge can be removed is by being slid horizontally, not vertically. Further, the cartridge is moving when the memory element is accessed; it would not be possible to remove the cartridge while it is moving. Thus, since the cartridge is prohibited from being detached in a vertical direction by the alignment features, and the cartridge is moving as the memory element is accessed, removal at the access position is not possible.

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

Art Unit: 2853

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julian D. Huffman whose telephone number is (571) 272-2147. The examiner can normally be reached 10:00a.m.-6:30p.m. Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Julian D. Huffman
10 November 2005


K. REGGINS
PRIMARY EXAMINER